



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,949	02/11/2004	Andreas Ewert	081276-1029-00	4259
34044	7590	04/27/2006	EXAMINER	
MICHAEL BEST & FRIEDRICH LLP 100 EAST WISCONSIN AVENUE MILWAUKEE, WI 53202			MULLINS, BURTON S	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 04/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/776,949

**Applicant(s)**

EWERT ET AL.

**Examiner**

Burton S. Mullins

**Art Unit**

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 12-21 is/are allowed.
- 6) ☒ Claim(s) 3,6,7,10,11 and 22 is/are rejected.
- 7) ☒ Claim(s) 4,5,8,9 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3, 6-7, 10-11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchiya (US 6,447,272) in view of Hardy (US 2,594,555). Tsuchiya teaches an external rotor motor with a stator 16 and a rotor 11 which surrounds the stator while leaving an air gap (not numbered; Figs.1&8); characterized in that the rotor 11 is pot-shaped with a pot base (not numbered; Figs.1&8) and pot jacket (not numbered; Figs.1&8). Regarding claim 6, Tsuchiya further teaches an assembly with a hub comprising the cylindrical body 9 of an impeller 8 driven by the rotor 11, with the assembly slid over and non-rotatably connected to the rotor 11.

Tsuchiya does not teach “at least one damper...composed at least partially of an elastic material...arranged on the outside of the rotor” and that the “damper comprises a damper cap... which surrounds the pot jacket or at least partially covers the pot base” (claim 3); or “at least one damper that is composed at least partially of an elastic material...arranged on the outside of the rotor” (claim 6).

Hardy teaches a vibration damper comprising a rubber insert for absorbing and reducing torsional impulses. In the Fig.1 embodiment, the damper comprises an elastic rubber band 17 forming a ‘damper cap’ in that it surrounds the pot jacket formed by the cylindrical flange 16 of

Art Unit: 2834

the rotating, pot-shaped flywheel hub 13. Hardy's elastic rubber band 17 absorbs and reduces torsional impulses from the crank shaft (c.1, lines 1-7; Fig.1).

It would have been obvious to modify Tsuchiya and provide "at least one damper...composed at least partially of an elastic material...arranged on the outside of the rotor" wherein the "damper comprises a damper cap... which surrounds the pot jacket" per Hardy in order to absorb and reduce torsional impulses. Regarding claim 6, in combination with Hardy's damper that surrounds the rotor pot base, Tsuchiya's assembly 8/9 slid would be slid over the damper and non-rotatably connected to the rotor 11.

Regarding claims 7 and 22, in the combination, Hardy's damper band 17 would be clamped between Tsuchiya's rotor 11 and impeller assembly hub 8/9, or on the inside of hub 8/9.

Regarding claim 10, the damper band 17 in Hardy is fastened radially on the rotor.

#### *Allowable Subject Matter*

3. Claims 2 and 12-21 are allowed. Regarding independent claim 12, Hardy's damper comprises a single layer of rubber and thus would not be "made of a hybrid material in which a damping soft component is arranged between two metal rings." Regarding independent claim 16, Hardy's damper 17 only covers the outer periphery of the cylindrical flange 16 and thus is in combination with Tsuchiya would not "at least partially [cover] the pot base" (claim 16).

4. Claims 4-5, 8-9 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claim 4, the prior art does not teach that the radially extending cap base...bears axially projecting concentric annular rings on its outer

Art Unit: 2834

surface facing away from the rotor. Regarding claim 5, the prior art does not teach that profiled axial ribs project radially from the cap edge on the inside, facing the rotor, of the axially extending cap edge. Regarding claims 8-9, the prior art does not teach that the damper is sprayed onto the inside wall of the hub or on the rotor. Regarding claim 23, Hardy's damper 17 only covers the outer periphery of the cylindrical flange 16 and thus is in combination with Tsuchiya would not be "fastened...axially on the rotor".

### ***Response to Arguments***

5. Applicant's arguments filed 27 February 2006 with respect to claims 3, 6-7, 10-11 and 22 have been considered but are not persuasive. Applicant argues that the Tsuchiya's ventilating fan would have to be "completely reconstructed" to incorporate a damping element of Hardy because the latter's damping element would have to be attached on both the inner and outer sides of the rotor bell 11 in Tsuchiya and the magnets 14 would no longer be fixed on the rotor bell 11. In response, the examiner points out that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Hardy's elastic rubber band 17 absorbs and reduces torsional impulses from the crank shaft on which drive sleeve 10 is secured (c.1, lines 1-7; Fig.1) and hence it would have been desirable to place such an element about the rotor bell 11 of Tsuchiya to absorb and reduce torsional impulses.

*Conclusion*

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have

Art Unit: 2834

questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins  
Primary Examiner  
Art Unit 2834

bsm

24 April 2006